

Amendments to the Specification

Please replace paragraph [0017] with the following amended paragraph:

The distance index described in the present invention avoids these pitfalls. First, by using resident-level case data the resulting index differentiates accurately between different locales within a county. Only two variables are required for each locale, one from each of the two following categories:

- P: county population, or county population density.
- D: distance in miles or kilometers, or distance in elapsed-minutes.

Please replace the objected-to equation in paragraph [0019] with the following amended equation:

$$\text{sign}(\lambda_j) = \begin{cases} +1 & \text{if } \lambda_j \geq 0 \\ -1 & \text{otherwise} \end{cases}$$

Please replace the objected-to equation in paragraph [0039] with the following amended equation:

$$E(\varepsilon_{jt} \varepsilon_{jt}) = \Omega_{jt} \text{ and } E(\varepsilon_{jt} \varepsilon_{js}) = 0 \text{ for } t \neq s.$$

Please replace paragraph [0047] with the following amended paragraph:

~~Anderson TW, Darling DA. Asymptotic theory of certain goodness of fit criteria based on stochastic processes. *Ann Math Stat.* 1952;23:193-212.~~

Please replace paragraph [0048] with the following amended paragraph:

~~Bindman AB, Grumbach K, Osmond D, et al. Preventable hospitalizations and access to healthcare. *JAMA.* 1995;274(4):305-11.~~

Please replace paragraph [0049] with the following amended paragraph:

~~Box GEP, Cox DR. An analysis of transformations. *J Roy Stat Soc, Ser B.* 1964;
26:211-52.~~

Please replace paragraph [0050] with the following amended paragraph:

~~Iezzoni LI, Ash AS, Shwartz M, et al. Judging hospitals by severity adjusted
mortality rates: the influence of the severity adjustment method. *Am J Public Health*
1996;86(10):1379-87.~~

Please replace paragraph [0051] with the following amended paragraph:

~~Iezzoni LI. The risks of risk adjustment. *JAMA.* 1997;278(19):1600-7.~~

Please replace paragraph [0052] with the following amended paragraph:

~~Iezzoni LI, ed. *Risk Adjustment for Measuring Healthcare Outcomes.* 2e.
Washington: AHSR Press, 1997.~~

Please replace paragraph [0053] with the following amended paragraph:

~~Millman M, ed. *Committee on Monitoring Access to Personal Health Care
Services.* Washington: IOM National Academy Press, 1993.~~

Please replace paragraph [0054] with the following amended paragraph:

~~Rosenthal GE, Harper DL, Shah A, et al. A regional evaluation of variation in
low severity hospital admissions. *J Gen Intern Med.* 1997;12(7):416-22.~~

Please replace paragraph [0055] with the following amended paragraph:

~~Silver MP, Babitz ME, Magill MK. Ambulatory care sensitive hospitalization
rates in the aged Medicare population: a rural urban comparison. *J Rural Health.*
1997;13(4):285-94.~~

Please replace paragraph [0056] with the following amended paragraph:

~~Snedecor GW, Cochran WG. *Statistical Methods*. 8e. Ames: Iowa Press, 1989.
p.293-5.~~

Please replace paragraph [0057] with the following amended paragraph:

~~Weinert C, Boik RJ. MSU Rurality index: development and evaluation. *Res
Nursing Health*. 1995;18:453-64.~~